

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re the Application of) Examiner: Chih-Min Kam
Jose A. Salas et al.) Art Unit: 1656
Serial No.: 10/534,210) Ref No.: 4408-P03626US00
Filed: March 17, 2006)
For: "Borrelidin-Producing)
Polyketide Synthase and its)
Use")

RESPONSE TO REQUIREMENT FOR RESTRICTION

At the outset it is noted that a shortened statutory response period of one (1) month was set forth in the Official Action dated May 28, 2008 in the above-identified patent application. Therefore, the initial due date for response is June 28, 2008.

A restriction requirement under 35 U.S.C. §121 was set forth in the May 28, 2008 Official Action. It is the Examiner's position that claims 1-95 in the present application are drawn to eight (8) patentably distinct inventions which are as follows:

Group I: Claims 1-17, 19-39, and 52-56, drawn to an isolated or recombinant nucleic acid molecule comprising a nucleotide sequence of SEQ ID NO: 1 or a nucleotide sequence related to SEQ ID NO: 1; a vector comprising the nucleic acid molecule; a host cell comprising the vector; and a method of modifying a parent polyketide synthase, comprising introducing into a host cell the nucleic acid molecule;

Group II: Claim 18, drawn to an isolated polypeptide encoded by a nucleic acid molecule comprising a nucleotide sequence of SEQ ID NO: 1 or a nucleotide sequence related to SEQ ID NO: 1;

Group III: Claims 40, 41, and 76-80, drawn to a nucleic acid construct comprising at least one first nucleic acid portion which is the nucleic acid molecule comprising a nucleotide sequence of SEQ ID NO: 1 or a nucleotide sequence related to SEQ ID NO: 1, wherein said at least one first nucleic acid portion encodes at least one domain of a borrelidin PKS and a second nucleic acid portion or portions encoding

at least one type of I PKS domain which is heterologous to the borrelidin PKS, a vector comprising the nucleic acid construct; and a host cell comprising the vector;

Group IV: Claims 58-73 and 75, drawn to a compound of formula 1 or formula 2;

Group V: Claims 88-93, drawn to a host cell capable of expressing a polyketide synthase for borrelidin or a borrelidin derivative or analogue, in which a borrelidin biosynthetic gene involved in production of the borrelidin starter unit in said cell, has been deleted, disrupted, or otherwise inactivated wherein said gene is selected from the list of consisting of *borC*, *borD*, *borE*, *borE*, *borG*, *borH*, *borK*, *borL*, *borM* and *borN*;

Group VI: Claims 42-51, 74, 82-87, 94 and 95, drawn to a method for increasing the capacity of a host cell to produce borrelidin, or a borrelidin derivative or analogue in a host cell expression a polyketide synthase, the method comprising upregulating a borrelidin biosynthetic gene involved in production of the borrelidin starter unit in said cell; or the method comprising deleting, disrupting, or otherwise inactivating a borrelidin biosynthetic gene involved in production of the borrelidin starter unit in said cell, therein the gene is *borG*;

Group VII: Claim 57, drawn to a method for the synthesis of polyketides comprising culturing the host cell of claim 53; and

Group VIII: Claim 81, drawn to a method for the synthesis of polyketides comprising culturing the host cell of claim 77.

The Examiner has also required a species election. Specifically, the Examiner has required that a single amino acid sequence of SEQ ID NOs: 2-43 and 113 be elected. Upon the allowance of a generic claim, additional species will be considered by the Examiner. Currently, the Examiner has indicated that claims 1 and 2 are generic.


In response to the above election requirement under 35 U.S.C. §121, Applicants hereby elect, without traverse, Group IV, namely, claims 58-73 and 75, drawn to compounds of formula 1 or formula 2. Inasmuch as the compounds of formula 1 or formula 2 have been elected, Applicants submit that the

above species election of amino acid sequences is not applicable. It appears that the Examiner intended for the species election to be required upon the election of Group I, II, or III.

Applicants hereby reserve the right to file one or more continuing applications, as provided in 35 U.S.C. §120, on the subject matter of any claims finally held withdrawn from consideration in this application.

Early and favorable action on the merits of this application is respectfully solicited.

Respectfully submitted,
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